

To whom it may concern,

Roadsafe 4WD have identified a requirement for a replacement front Upper control arm (UCA) that is fitted to a wide range of late model IFS vehicles utilizing the Double wishbone front suspension design. In this design the strut is mounted to the chassis and not the UCA.

IFS vehicles when raised with aftermarket suspension above 30mm will disrupt the vehicles relationship with factory set geometry and create issues such as...

- Reduced caster correction
- Bump steering resulting in reduced handling
- Clearance issues to suspension & wheels/tyres
- Strength by design of OE equipment in offroad scenarios

As you can see by the FEA result there is minimal deflection in the aftermarket arm when compared to the OEM unit resulting in enhanced handling and vehicle control. NVH is controlled by OE Rubber bushing mounting to the chassis.

Our components are fitted with OE Style Ball joint & Rubber bushings to maintain manufacturers design.

Roadsafe 4WD have developed a range of product drawing from over 30 years of experience in the manufacture & supply of chassis parts including but not limited to steering & suspension components. Roadsafe 4wd UCA's branded as "Blackhawk" have been designed in conjunction with industry experts to ensure vehicle fitment is comprehensive.

OEM & Blackhawk UCA samples have been computer modeled resulting in FEA testing with static and bump/lateral load tests, these results have been reviewed and certified by VASS Engineers Enkelman & associates to unequivocally confirm the design and materials chosen to manufacture the Blackhawk arms by long term suspension manufacturer Roadsafe Automotive products, are of sound

design and furthermore exceed the original equipment by design in strength and functionality.

The manufacturing process is controlled by Roadsafe with a range of Quality Assurance procedures in place, some of these include...

- Welding specifications, Material & procedure
- Material selection
- Manufacturing jigs inspected for conformity regularly
- Random post manufacturing QC checks
- ISO/TS16949:2009
- IATF number 0224504 – Manufacture of steering and suspension parts

Based on years of experience in manufacturing a large volume of suspension components, Roadsafe is able to ensure the manufacturing process is of standard delivering a high quality component to market.

If you have any queries please don't hesitate to contact me.

Regards Troy Schipper

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